KEL-TEC KSG

Safety, Instruction, and Parts Manual

MADE IN USA

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A. SAFETY INFORMATION AND WARNINGS

STATEMENT OF LIABILITY

This firearm may be classified as a dangerous weapon and is surrendered by KEL-TEC CNC INDUSTRIES INC. with the understanding that the purchaser assumes all liability resulting from unsafe handling or any action that constitutes a violation of any applicable laws or regulations. Firearms can cause serious injury and death. **Safety must be the prime consideration of anyone who handles firearms. Always treat a firearm as though it were loaded. Always keep the muzzle pointed in a safe direction.** In owning a firearm, you are responsible for the firearm's safety and security. **Always secure firearms from children.**

READ THESE INSTRUCTIONS AND WARNINGS CAREFULLY, BE SURE YOU UNDERSTAND THESE INSTRUCTIONS AND WARNINGS BEFORE USING THIS FIREARM.

This SAFETY, INSTRUCTION & PARTS MANUAL should always accompany this firearm and be transferred with it upon change of ownership or when the firearm is loaned or presented to another person. A copy of the SAFETY, INSTRUCTION & PARTS MANUAL is available FREE upon request and can also be downloaded from the internet at: http://www.keltecweapons.com

READ AND CAREFULLY FOLLOW THESE WARNINGS AND INSTRUCTIONS

These warnings and instructions are provided to assure the safe functioning of the firearm. Failure to heed these instructions may result in improper functioning and serious injury.

Kel-Tec firearms are designed to function reliably with proper care and knowledgeable use. Do not use your firearm unless you fully understand these instructions, and the safe operation of your firearm.

Only safe gun-handling habits will ensure the safe use of your firearm. This is your responsibility. Accidents are the result of violating the rules of safe gun handling noted below and common sense.

Before handling a firearm, understand its operation.

Never accept or pick up a firearm without checking the magazine and the chamber to assure the weapon is empty. Do not trust the extractor to clear the chamber, always look and feel.

Always make sure the **muzzle is pointed in a safe direction at all times**.

Never point a firearm at anyone or anything you do not intend to shoot.

Ensure the barrel is free of obstructions prior to firing. Open the action and clear the firearm of all ammunition before checking the barrel of the **unloaded** firearm.

Keep your firearm unloaded when not in use. Never keep a loaded firearm in the home or vehicle. Never store a firearm with a cartridge in the chamber.

Never store firearms and ammunition together, keep them locked up and away from children.

Never touch the trigger when working the action.

Never alter any components of your firearm.

Never take medications, drugs, or alcohol when handling firearms.

Never load or unload a firearm without assuring the muzzle is pointed in a safe direction.

Never load a firearm except immediately before shooting.

SAFE GUN HANDLING IS YOUR RESPONSIBILITY

Discharging firearms in poorly ventilated areas, cleaning firearms, or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm, and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

Never discharge a firearm without proper shooting glasses and ear protection. Never shoot at any water surface or any surface where a ricochet can occur.

Never shoot until you are sure of your backstop and what lies beyond it.

If the gun does not discharge after pulling the trigger, do not change its direction for at least 30 seconds, you could be having a “hang fire”, and the cartridge could go off when you do not expect it. After waiting 30 seconds, remove the magazine and remove the unfired case, while keeping the firearm pointed in a safe direction

Always be aware of other people so that they cannot accidentally walk into the line of fire. When firing on a target range, be alert and follow the range officer’s commands. Never cross obstacles such as fences or streams with a loaded firearm.

Do not allow a firearm to be used by individuals who do not understand its safe operation and the rules of safe gun handling.

WARNING: After firing several rounds, the exterior metal parts of the firearm get VERY hot and can cause severe burns if touched.

Be sure all accessories are compatible with the firearm and that the accessories do not interfere with safe operation of the firearm.

When transporting your firearm, be sure your firearm is unloaded and on SAFE.

If you do not understand how to operate any of our products or have any questions about their safe handling, please write, call, or email us at:

KEL-TEC CNC INDUSTRIES INC
1475 Cox Road
Cocoa FL 32926
Telephone Number: 321-631-0068
Toll free: 1-800-515-9983
Hours: M-F 9am-3pm EST (excluding holidays)
Website: http://www.keltecweapons.com
Email: customerservice@kel-tec-cnc.com

B. OVERVIEW

Description

The KSG is a dual-magazine select-feed 12-gauge pump action shotgun. The bullpup dual-magazine select-feed design provides the operator with a more compact layout, increased total capacity, and the option to rapidly switch between two magazines of ammunition.

The KSG features positive extraction and ejection, allowing it to be reliably fired in any shooting orientation. Loading and ejection are combined into a single port rearward of the grip assembly under the shotgun, enabling the KSG to be fired from both the dominant and non-dominant side.

Two integral MIL-STD-1913 Picatinny rails, located above the barrel and on the forend, come standard with the KSG for mounting accessories. Unloaded, the KSG maintains a center of gravity over the grip assembly to facilitate ease of handling.

Nomenclature

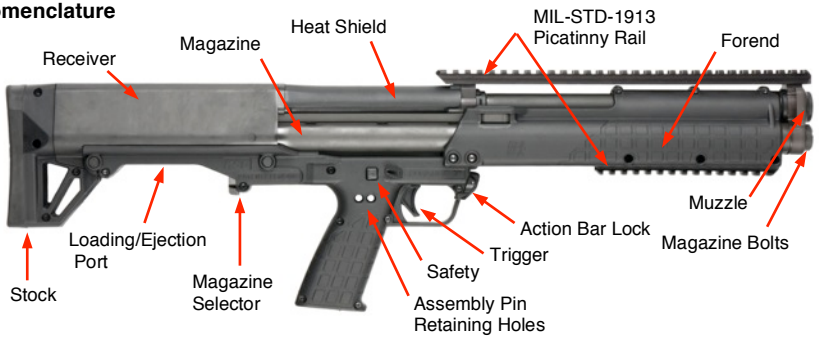


Figure B-1: Side-View

Specifications

Design Features	
Operating System	Pump Action
Gauge	12
Capacity	6+6+1 dual magazines, 3” shells
Chamber	12-gauge 3.00” (76 mm)
Barrel Length	18.50” (470 mm)
Length of Pull	13.0” (330 mm)
Forend Travel	4.1” (104 mm)
Accessory Mount	MIL-STD-1913 Picatinny Rail

Dimensions and Weight	
Total Length	26.1” (664mm)
Total Width	2.2” (56 mm)
Total Height	8.0” (204 mm)
Width of Grip	1.2” (30 mm)
Width of Forend	2.1” (54 mm)
Width of Stock	2.1” (54 mm)
Weight	6.9 lbs (3.1 kg)

Ammunition

The KSG is chambered for 12-gauge 3” shells and may safely fire both lead and steel shot. Shells 2-3/4” and shorter are also safe to fire, but anything shorter than 2-3/4” should be thoroughly tested for reliable feeding and ejection. For reference, the chamber gauge and length is indicated on the grip of the shotgun.

WARNING: ALWAYS USE SHELLS OF THE CORRECT GAUGE AND LENGTH OR SHORTER. DO NOT USE NON-STANDARD AMMUNITION OR SHELLS WITH PRESSURES EXCEEDING SAAMI STANDARDS. FAILURE TO FOLLOW THIS WARNING MAY RESULT IN SERIOUS INJURY OR DEATH AND DAMAGE TO YOUR FIREARM.

Only use commercially available US-manufactured ammunition that meets SAAMI established standards. Inspect your ammunition to make sure it is clean, dry, and in good condition. Never use non-standard, reloaded or damaged shells. Any other ammunition is considered non-standard and its use may void the warranty on this firearm.

Kel-Tec firearms are manufactured from high quality materials. They will provide a lifetime of service if properly maintained. However, all warranties, expressed or implied, are voided and Kel-Tec will not be liable for property damage or personal injury and consequential damages, if faulty, non-standard, or reloaded ammunition is used in any Kel-Tec firearm.

Sling Mounting

The KSG comes equipped with forward attachment points on the left and right sides of the barrel assembly as well as a single rear attachment slot in the stock.

Figure B-2: KSG Equipped with Kel-Tec Sling

The different sling attachment points on the KSG should be used to mount the included 1¼” wide nylon sling but will also accommodate aftermarket slings of the same width.

C. OPERATING INSTRUCTIONS

Safety

The KSG features a cross-bolt safety located behind the trigger on the grip assembly. When the safety is activated, the cross-bolt blocks the sear from releasing and prevents the trigger from being pulled. Please note that the safety will not engage unless the hammer is cocked.

For right-handed users, the safety is generally depressed with the right thumb until a noticeable “click” is heard and the red letter “F” emerges on the safety. The safety is color coded and labeled to enhance visibility and hasten safety assessment.

White “S” for SAFE

Red “F” for FIRE

WARNING: NEVER TOTALLY RELY ON YOUR MECHANICAL SAFETY AS IT CAN FAIL OR UNINTENTIONALLY BE DISENGAGED. YOUR MECHANICAL SAFETY IS NOT A SUBSTITUTE FOR SAFE GUN HANDLING PRACTICES.

Loading Magazines

1. Ensure your muzzle is pointed in a safe direction before loading.
2. Engage the safety by ensuring the white “S” is visible.
3. Ensure the forend is not in the rearmost position. If so, move the forend forward.
4. Place magazine-selector to the positions shown in *Figure C-1* depending on desired loading configuration. The magazine-selector indicates which magazine is selected for loading by “pointing” to the active magazine. For example: if the magazine-selector is pointing left, the left magazine is available for loading. The magazine-selector may also be placed in the middle position, which prohibits loading and feeding.

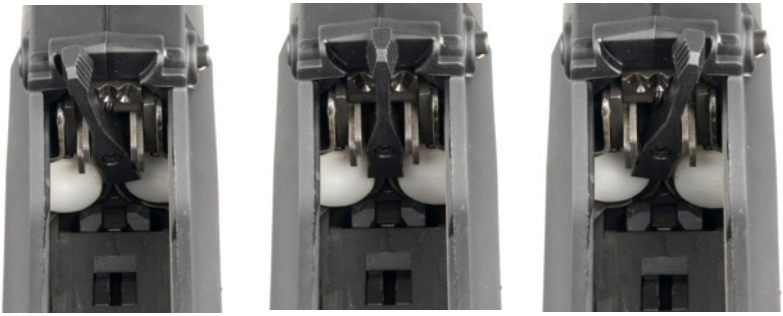


Figure C-1: Magazine Selector Orientations

5. With thumb on the base of the round, insert the round into the loading/ejection port and slide the round into the magazine using your thumb as shown in *Figure C-2*.

Figure C-2: Loading a Shell into the Right Magazine Tube

Chambering from Magazine

1. Ensure the magazine-selector is oriented to feed from the desired magazine tube.
2. Pull down the action bar lock and maintain downward pressure to unlock forend.
3. Actuate the forend fully rearward and then fully forward to chamber a round.

CAUTION: DO NOT HOLD THE FOREND BEHIND THE PICATINNY RAIL. DOING SO WILL SHORT STROKE THE ACTION AND PINCH YOUR HAND.

Manual Chamber Loading

The procedure for loading a shell directly into the chamber of the KSG is different than most other shotguns because of the combined loading and ejection port. To load a shell into the chamber of the KSG, use the following procedure as a guideline.

1. Ensure your muzzle is pointed in a safe direction before loading.
2. Engage the safety by ensuring the white “S” is visible.
3. Pull down the action bar lock and maintain downward pressure to unlock forend.
4. Actuate the forend so that it is about a 1/2” from the rearmost position to prevent the shell lifters from elevating and blocking access to the chamber.
5. Place shell in chamber and cycle the action forward to chamber inserted shell.

Firing

1. Load a shell into the chamber of the KSG manually or from the magazine.
2. Aim at the target, taking notice of the target’s backdrop.
3. Disengage the safety, taking notice of the red letter “F” that emerges on the safety.
4. Place trigger finger into trigger guard.
5. When the trigger is depressed the KSG will fire. Cycle action to eject the empty case and feed a new round if a loaded magazine tube is selected.

Unloading

1. Ensure your muzzle is pointed in a safe direction before unloading.
2. Engage the safety by ensuring the white “S” is visible.
3. Pull down the action bar lock and maintain downward pressure to unlock forend.
4. Cycle action repeatedly using the forend until the white magazine follower is visible from the chamber, as shown previously in *Figure C-1.*
5. Actuate the magazine-selector to select the other magazine tube for unloading.
6. Repeat steps 3-4.
7. When the KSG is fully unloaded both white magazine followers should be visible from the ejection port and the chamber should be visibly empty.
8. With the forend in its rearmost position, always visually and tactually check the chamber to confirm the firearm is unloaded.

D. DISASSEMBLY

For regular maintenancing of the KSG it will be necessary that you become familiar with its disassembly. The following sections should be followed in sequential order and continued as needed depending on desired maintenance.

Figure D-1: KSG General Disassembly

WARNING: ALWAYS ENSURE THE KSG IS CLEAR OF ALL AMMUNITION BEFORE ATTEMPTING DISASSEMBLY. IF THE KSG HAS BEEN FIRED, WAIT A SUFFICIENT AMOUNT OF TIME FOR THE COMPONENTS TO COOL BEFORE ATTEMPTING DISASSEMBLY.

Removal of Grip Assembly

1. Place magazine-selector to the center position.
2. Engage the safety by ensuring the white “S” is visible.
3. Remove the rear assembly pins adjacent to the ejection port located on the grip assembly and place them in the assembly pin retaining holes as shown in *Figure D-2*.

Figure D-2: Place Rear Assembly Pins in Retaining Holes

4. Remove the grip assembly by lifting the rear of the assembly directly upwards as shown in *Figure D-3*.

Figure D-3: Lift Grip Assembly Directly Upwards

Removal of the Stock

1. Grip the stock as shown in *Figure D-4* and pull rearward to remove.

Figure D-4: Pull Stock Rearward

2. Move the forend to its rearmost position to gain access to the bolt. The bolt should now be resting in the receiver of the KSG and can be easily removed by reaching in and lifting out the bolt as shown in *Figure D-5*.

Figure D-5: Remove Exposed Bolt from Receiver

KEL-TEC KSG EXPLODED VIEW

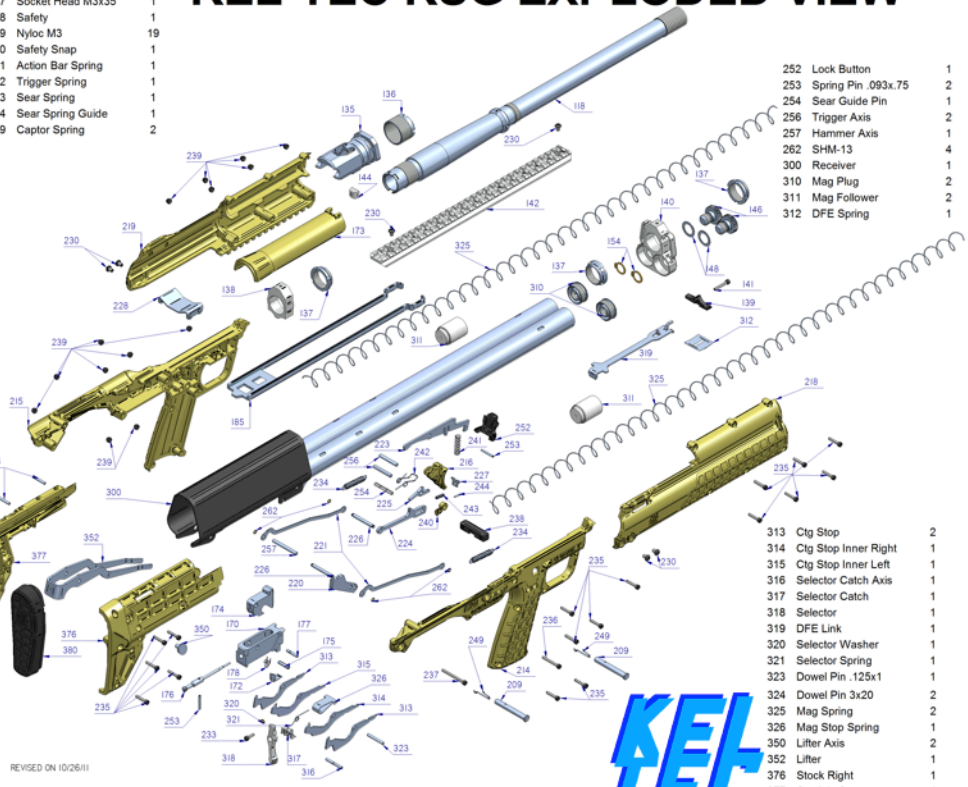
118	Barrel	1
135	Barrel Extension	1
136	Barrel Nut	1
137	Barrel Ring	3
138	Sight Base	1
139	Pump Buffer	1
140	Muzzle Plate	1
141	Socket Head M3x20	1
142	Picatinny	1
144	Recoil Pad	1
146	Mag Bolt	2
148	Wavy Washer	2
154	Mag Bolt Retainer Clip	2
170	Bolt	1
172	Extractor	1
173	Heat Shield	1
174	Bolt Lock	1
175	Spring Pin	1
176	Firing Pin	1
177	Extractor Axis	1
178	Extractor Spring	1
185	Bolt Carrier	1
209	Frame Pin	2
214	Grip Right	1
215	Grip Left	1
216	Trigger	1
218	Forend Right	1
219	Forend Left	1
220	Hammer	1
221	Hammer Bar	2

236	Socket Head M3x25	1
237	Socket Head M3x35	1
238	Safety	1
239	Nyloc M3	19
240	Safety Snap	1
241	Action Bar Spring	1
242	Trigger Spring	1
243	Sear Spring	1
244	Sear Spring Guide	1
249	Captor Spring	2

252	Lock Button	1
253	Spring Pin .093x.75	2
254	Sear Guide Pin	1
256	Trigger Axis	2
257	Hammer Axis	1
262	SHM-13	4
300	Receiver	1
310	Mag Plug	2
311	Mag Follower	2
312	DFE Spring	1

313	Ctg Stop	2
314	Ctg Stop Inner Right	1
315	Ctg Stop Inner Left	1
316	Selector Catch Axis	1
317	Selector Catch	1
318	Selector	1
319	DFE Link	1
320	Selector Washer	1
321	Selector Spring	1
323	Dowel Pin .125x1	1
324	Dowel Pin 3x20	2
325	Mag Spring	2
326	Mag Stop Spring	1
350	Lifter Axis	2
352	Lifter	1
376	Stock Right	1
377	Stock Left	1
380	Butt Pad	1

223	Action Lock	1
224	Sear Bar	1
225	Sear	1
226	Hammer Bar Pin	2
227	Sear Catch	1
228	Mag Stop Actuator	1
230	Button Head M4x6	6
233	Socket Head M3x10	1
234	Hammer Spring	2
235	Socket Head M3x16	17



Separation of the Barrel and Receiver Assemblies

The barrel assembly is secured to the receiver assembly via two slotted magazine bolts located on the front of the KSG. To remove these bolts they must be unscrewed using an object with a flat edge such as a quarter or the rim of a spent shell casing.

1. Using your tool of choice, unscrew the magazine bolts at the same rate alternating between the two bolts a half-turn at a time. This procedure is illustrated in *Figure D-6*.

Figure D-6: Unscrew Magazine Bolts with Alternating 1/2 Turns

2. The DFE (Double-Feed Eliminator) Link must be removed before separating the barrel and receiver assemblies. To remove the DFE Link, place downward pressure on the link and move the forend over the DFE Link legs as shown in *Figures D-7 & D-8*.

Figure D-7: Hold DFE Link Down and Slide Forend Away from Link

Figure D-8: Remove DFE Link before Separating Receiver & Barrel Assemblies

3. With the KSG upside-down, simultaneously pull the barrel assembly and receiver assembly linearly apart as shown in *Figure D-9*.

Figure D-9: Pull Barrel Assembly Apart from Receiver Assembly

CAUTION: FURTHER DISASSEMBLY SHOULD ONLY BE PERFORMED BY A CERTIFIED GUNSMITH OR KEL-TEC CNC INC. ATTEMPTING FURTHER DISASSEMBLY COULD VOID YOUR WARRANTY.

E. ASSEMBLY

Joining of the Barrel and Receiver Assemblies

1. Ensure the bolt carrier is locked into the forend as shown in *Figure E-1*.

Figure E-1: Ensure Bolt Carrier is Locked into Forend

2. Orient the barrel and receiver assemblies as shown in *Figure E-2* and push the two units together, ensuring the magazine bolt screw threads seat into the magazine plug screw threads.

Figure E-2: Join Barrel Assembly to Receiver Assembly

3. Before joining the Barrel and Receiver Assemblies completely, reinsert the DFE Link by hooking it under the cartridge stops. While applying downward pressure on the DFE link, slide the forend over the DFE Link legs to secure the link to the Barrel and Receiver Assemblies. This process is illustrated in *Figure E-3*.

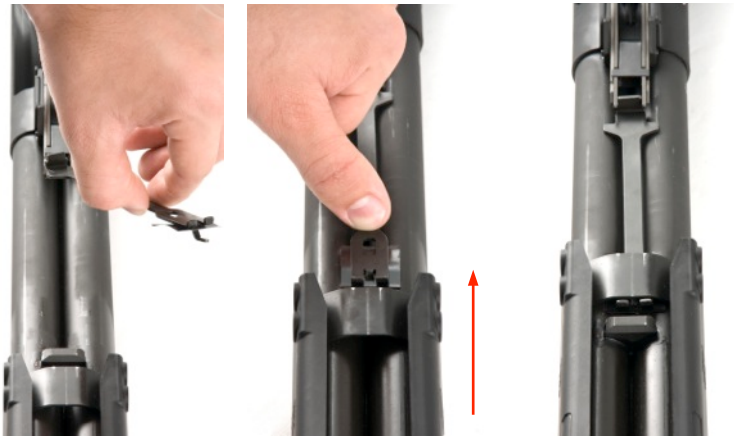
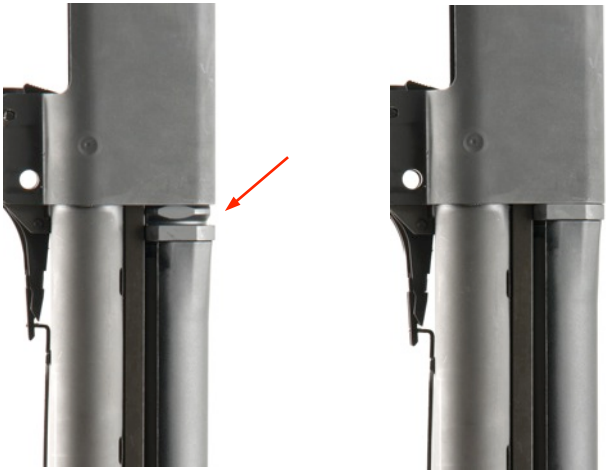


Figure E-3: Slide Forend over DFE Link Legs to Secure Assemblies

4. Using your tool of choice, screw the magazine bolts into the magazine plugs at the same rate, alternating between the two bolts a half-turn at a time until both bolts firmly resist further tightening. This must be done because the bolts screw into the same piece and will prematurely bind if one bolt is tightened faster than the other.

5. To ensure the two assemblies are properly joined, visually check that no gap exists between the barrel extension and receiver, as shown in *Figure E-4*. Additionally, attempt to pull the barrel and receiver assemblies apart and press them together, checking for any travel. If there is any travel or gap present, the magazine bolts are not fully tightened and steps 1-2 should be repeated.



Incorrect: Gap Present **Correct: No Gap Present**

Figure E-4: Ensure No Gap Exists Between Assemblies

Insertion of the Bolt

1. Cycle the forend completely rearward before attempting to insert the bolt.

2. Insert the bolt onto the bolt carrier as shown in *Figure E-5*, first inserting the bolt on its side before rotating 90° to its upright position. The rear lip of the bolt should easily fit into the square cutout of the bolt carrier.

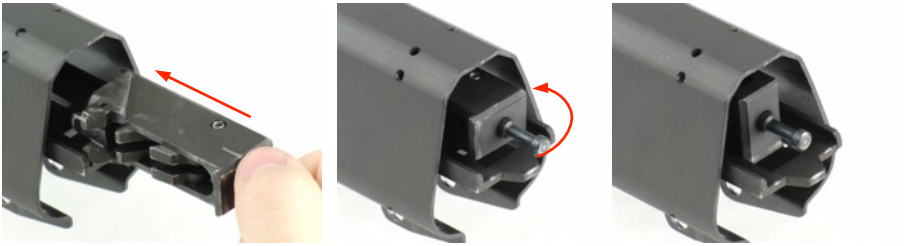


Figure E-5: Insert Bolt onto Bolt Carrier Sideways and Rotate 90°

3. Ensure the bolt is in the proper position by pushing the bolt completely forward. You can confirm this by checking to see if there is a gap between the mating surfaces shown in *Figure E-6*, which is composed of the bolt lip and bolt carrier cutout.

4. Move the forend completely forward to lock the bolt into place. You should hear a definitive “click” indicating the bolt is properly locking with the barrel extension.

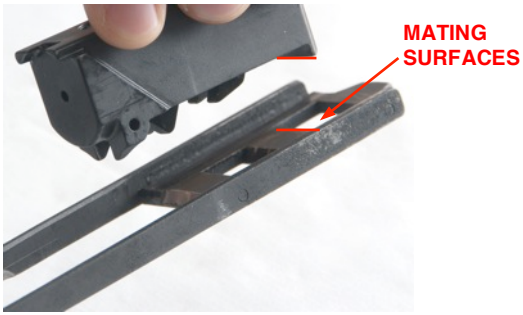


Figure E-6: Push Bolt Fully Forward on Bolt Carrier

Insertion of the Stock

1. Ensure the forend is completely forward before attempting to insert the stock.
2. Insert the stock as shown in *Figure E-7* and ensure the lifter axes are in place. If you are experiencing uncommonly high resistance while inserting the stock, it may help to lift up on the firing pin during assembly.

Figure E-7: Lift Firing Pin while Inserting Stock

Attaching the Grip Assembly

1. Place magazine-selector to the center position.
2. Engage the safety by ensuring the white “S” is visible.
3. Move the forend and DFE Link rearward at least an inch so the grip assembly may be inserted as shown in *Figure E-8*, ensuring the forward part of the grip assembly is inserted under the grip catch.

Figure E-8: Move Forend Rearward and Insert Grip Assembly

5. Remove the assembly pins from their pin retaining holes and insert them into the assembly pin holes located on the grip assembly.
6. After the KSG is fully assembled, check the firearm for proper functioning by holding down the action bar lock and cycling the action.

F. CLEANING AND MAINTENANCE

Maintenance

Your KSG is a precision instrument and will provide a lifetime of faithful service if it is properly cleaned and maintained. It is recommended that you clean your KSG after every shooting session or more frequently if needed. Be sure to unload your KSG *(see Unloading on pg. 7)* before performing any cleaning or maintenance procedures.

CAUTION: NEVER USE AUTOMOTIVE BRAKE CLEANER OR ANY SOLVENT NOT DESIGNED FOR POLYMER FIREARMS. DOING SO MAY DAMAGE THE FIREARM AND VOID YOUR WARRANTY.

1. Disassemble the KSG *(see Disassembly on pg. 8)*.
2. Thoroughly clean all exterior sides of the bolt and receiver with solvent and brush.
3. Brush the barrel bore and chamber with a good powder removing solvent and bore brush. Wipe the areas clean with patches or a swab.
4. Using a small brush dipped in solvent, remove all deposits from around the breech of the barrel and barrel extension, as well as all adjacent areas that have been subjected to powder or primer residue.
5. Clean the magazine tubes with solvent and brush if needed.

Lubrication

After cleaning the entire gun, use a cloth to apply a light coating of high quality gun oil to all internal and exterior metal surfaces and wipe clean. If the need arises to lubricate the grip assembly, do so through the top of the assembly.

Manually cycle the action back and forth to check the function of the firearm. If any parts are damaged or badly worn or the firearm does not work correctly the firearm should not be fired and should be returned to Kel-Tec for servicing immediately.

WARNING: DISCHARGING A FIREARM WITH OIL, GREASE, OR ANY OTHER MATERIAL EVEN PARTIALLY OBSTRUCTING THE BORE COULD RESULT IN SERIOUS INJURY OR DEATH AND SERIOUS DAMAGE TO YOUR FIREARM.

Troubleshooting

Proper functioning of your firearm is directly related to proper maintenance and care as well as the quality of ammunition you use. If in the unlikely circumstance your KSG malfunctions, we have included a list of several suggested remedies below.

If the KSG Fails to Fire:

You may be experiencing a misfire and should point the barrel of the KSG in a safe direction, engage the safety by ensuring the white “S” is visible, and wait at least 30 seconds before fully cycling the action and ejecting the round.

Otherwise, ensure the action is fully forward. The KSG is designed to prohibit firing out of battery to protect the user.

Double Feed:

A double feed may occur if there is a failure to extract. Engage the KSG’s safety and place the magazine selector to the middle non-feed position.

Rotate the KSG to expose the ejection port and visually examine the malfunction. Depending on the orientation of the rounds, it is usually easiest to push the double-fed shell back into the magazine and cycle the action to clear the shell.

Otherwise, you must manually reach into the ejection port and remove the interfering shell by rotating it around the shell lifters as shown below.

Figure F-1: Clear Double Feed by Rotating Shell Around Lifters

Magazine Selector Jammed:

The selector-lever will not operate if a shell is not fully loaded into the magazine tubes. Ensure all shells are completely loaded into the magazines.

H. SERVICE, REPAIR, AND WARRANTY

This warranty is granted by Kel-Tec CNC Industries, Inc. P.O. Box 236009, Cocoa, FL 32923. This lifetime warranty is effective from the date of purchase and applies to the original owner of a Kel-Tec firearm.

Kel-Tec firearms are warrantied to be free from defects in material and workmanship. Any such defects of which Kel-Tec receives written notice by the original owner, will be remedied by Kel-Tec without charge within a reasonable time after such notification and delivery of the product as provided below.

If your Kel-Tec firearm should ever require service or repair please perform the following to ensure fast and reliable service:

1) Include a copy of a bill of sale in the owner's name or a copy of ATF Form 4473 indicating date of purchase.
2) Include a written copy of the model and serial number of the firearm and a description of the difficulty experienced and service desired.
3) Include your name, desired return address, and a number where we can reach you.
4) Also include a written list of any accessories in your shipment – Kel-Tec will not be responsible for any item that was not listed and confirmed by Kel-Tec.
5) Be sure the firearm is completely unloaded and the shipping container is free of ammunition. It is against postal and commercial regulations to ship ammunition.
6) Securely package your Kel-Tec firearm and ship (transportation charges pre-paid) to:

Kel-Tec CNC, Inc
Service Department
1475 Cox Road
Cocoa, FL 32926.

It is recommended that shipments be insured by the owner, since Kel-Tec will accept no responsibility for loss or damage in transit.

Transportation and insurance charges for return to owner will be paid by Kel-Tec if the claim is covered by the warranty.

Under no circumstances shall Kel-Tec be responsible for incidental or consequential damages with respect to economic loss or injury or property damage, whether as a result of breach of express or implied warranty, negligence or otherwise. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Kel-Tec will not be responsible for defects resulting from careless handling, unauthorized or unsafe adjustments or modifications, non-standard, defective, or improper ammunition, corrosion, neglect, fire damage, water damage, theft, abuse, ordinary wear and tear, or unreasonable use.